



Hexion Specialty Chemicals, Inc.

16122 River Road  
Norco, LA 70079

DEQ - OES MAIN FILE

2007 FEB 27 PM 12:58

February 23, 2007

**CERTIFIED MAIL**

Bijan Sharafkhani, P.E., Administrator  
Environmental Services - Environmental Technology  
Louisiana Department of Environmental Quality  
P. O. Box 4313  
Baton Rouge, LA 70821-4313

original to JOHW

copy to HW/G2/Williams

Subject: Submittal of Dioxin & Furan Test Plan for Alternative Monitoring Application for Maximum Catalyst Time In-Use for 40 CFR Subpart EEE

RCRA Permit: LAD 980621104

Hexion Specialty Chemicals, Inc. – Norco, LA

Agency Interest No. 87883

As requested by LDEQ in efforts to approve the Maximum Catalyst Time In-Use proposed in the Alternative Monitoring Application for 40 CFR Subpart EEE, Hexion Specialty Chemicals, Inc. (Hexion) is submitting a test plan for sampling and analyzing dioxin and furans from the organic chloride incinerator systems (NCIN-1 and NCIN-2). Hexion plans to commence dioxin/furan testing as early as March 26, 2007. The start date will be confirmed one week before the start of the test.

**Test Condition**

The proposed test will consist of one test condition for NCIN-1 and NCIN-2. Table A defines the test schedule. The test condition will be at maximum liquid waste feed rates. The test condition will be composed of three replicate sampling runs. During the respective maximum liquid waste feed conditions for NCIN-1 and NCIN-2, only liquid waste will be treated; all vapor vents will be directed to the incinerator not being tested. Allyl Chloride Heavy Ends (ACHE) will be the only liquid waste feed to the Incinerators during the test.

The tests will follow the approved Quality Assurance Project Plan (QAPP) from the initial Comprehensive Performance Test (March 2004) in regards to dioxin and furan testing, sampling and analysis. Figure 1 provides a flow diagram of people involved in the test and the role they will serve during the test. Those involved in the test will be familiar with the QAPP and sign off that the QAPP was reviewed.

**Sampling and Analysis**

Stack gas samples will be collected for PCDD/PCDFs using a SW-846 Method 0023A sampling train. The extracts from the Method 0023A sampling train will be analyzed via SW-846 Method 8290 [high resolution gas chromatography/high resolution mass spectrometry (HRGC/HRMS)].

The stack sampling will be performed by METCO Environmental and the analytical will be performed by STL Knoxville. Each facility is LELAP approved (Attachment 1).

**Steady State Conditions**

The target operating conditions for the test are shown in Table B. Steady-state operating condition will be achieved when the liquid waste feed rate, firebox temperature, and caustic scrubber recycle pH have stabilized at the target operating conditions for at least 1 hour. This will allow rolling averages to be established prior to starting the test. When the system being tested reaches the test target operating conditions, the testing and sampling may commence. If there are any interruptions during testing, steady state conditions will be reestablished for at least 1 hour before resuming testing and sampling.

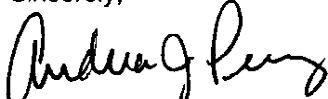
**CEMS**

In lieu of performing a CMS Performance Evaluation Test, parametric instruments used to meet compliance with the HWC MACT will follow existing calibration protocol and frequency. The frequency is sufficient to assure accurate reading of parameters during the test. Table C provides a listing of applicable parametric instruments and the most frequent calibration of each instrument.

In order to run at these operating conditions, an exemption to test for our existing Title V Air permit may be required as Hexion is in the process of receiving a new Title V Air permit to cover these parameters. As soon as this authorization is approved and the test plan is approved, Hexion will finalize the dates for performing the tests.

If there are any question or you need additional information, please contact Andrea Perez at (504) 472-6563.

Sincerely,



Andrea J. Perez  
Environmental, Health & Safety Manager

**Table A: Proposed Test Schedule**

<b>Day</b>	<b>Incinerator Test Condition</b>	<b>Scope of Work</b>	<b>Time</b>	<b>Duration</b>
1	NCIN-1	Setup/Preliminary Measurements	0700-1100	4 hours
1	NCIN-1: Condition 1	Runs 1	1100-1700	6 hours
2	NCIN-1: Condition 1	Run 2 - 3	0700-1700	10 hours
3	NCIN-2	Setup/Preliminary Measurements	0700-1100	4 hours
3	NCIN-2: Condition 1	Runs 1	1100-1700	10 hours
4	NCIN-2: Condition 1	Run 2 - 3/Demob	0700-1700	10 hours
5	Contingency Day			

**Table B: Proposed NCIN-1 and NCIN-2 Target Operating Conditions During Testing**

<b>Operational Parameter</b>	<b>NCIN-1</b>	<b>NCIN-2</b>	<b>AWFCO</b>	<b>Averaging Period</b>
<b>Group 1 Parameters</b>				
Maximum liquid waste feed rate (lb/hr)	8343	7229	Yes	Hourly Rolling Average
Minimum combustion temperature (° F)	1718	1718	Yes	Hourly Rolling Average
Minimum caustic scrubber recycle flow (gpm) (minimum L/G)	550	403 per scrubber	Yes	Hourly Rolling Average
Minimum caustic scrubber pH	9.2	8.2	Yes	Hourly Rolling Average
Maximum caustic scrubber recycle conductivity (µS/cm)	20664	19908	Yes	12-Hour Rolling Average
Maximum stack gas flow (mscfm)	<b>17.19</b>	<b>14.56</b>	Yes	Hourly Rolling Average
<b>Group 2 Parameters</b>				
Maximum combustion chamber pressure (inwc)	0.0	0.0	Yes	None; 1-second delay
Maximum stack gas CO conc. (ppmv, dry @ 7% O <sub>2</sub> )	100	100	Yes	Hourly Rolling Average
<b>Group 3 Parameters</b>				
Minimum caustic scrubber recycle pressure (psig)	<b>13</b>	<b>54</b>	No	Hourly Rolling Average
Minimum CATOX inlet gas temperature (° F)	330	330	Yes	Hourly Rolling Average
Maximum CATOX inlet gas temperature (° F)	700	700	Yes	Hourly Rolling Average

Notes: AWFCO - automatic waste feed cutoff

**Table C: Parametric Instrument Calibration Data**

Parameter Monitored	Instrument Type	Manufacturer	Calibration Frequency	Model Number	Latest CMS Certification or Audit					
					NCIN-1		NCIN-2			
Instrument ID	Certification / Audit Type	Date	Instrument ID	Certification / Audit Type	Date	Instrument ID	Certification / Audit Type			
Firebox combustion chamber temperature	Thermocouple	Honeywell	Annual	STT3000	TI-0553	Calibration	7/20/06	TI-5006	Calibration	5/15/06
ACHE waste feed rate	Mass Flow meter	Micro Motion	Every 3 Years	DS100H	FC-0551A	Certification	7/27/06	FC-5001	Certification	7/05/05
TCP waste feed rate	Mass Flow meter	Micro Motion	Every 3 Years	CMF100	FC-5533	Certification	7/26/06	FC-5081	Certification	7/05/05
HPRU waste feed rate	Mass Flow meter	Micro Motion	Every 3 Years	DS100H	FC-5098	Certification	7/27/06	N/A	N/A	N/A
Process vent gas flow	Diff. pressure transmitter	Honeywell	Annual	STG120	FI-5057	Calibration	7/20/06	N/A	N/A	N/A
Process vent gas flow	Diff. pressure transmitter	Rosemount	Annual	3051	N/A	N/A	FI-5029	Calibration	5/15/06	
Process vent gas flow (SHAC)	Flow sensor	Panametrics	Annual	GM868	FI-5602	Verification	7/20/06	FI-5115	Verification	5/15/06
Atomizing steam pressure	Pressure switch	U/E	Annual	J-120-356	Local PI	Calibration	5/15/06	N/A	N/A	N/A
Atomizing steam pressure	Pressure switch	U/E	Annual	35A	N/A	N/A	Local PI	Calibration	7/20/06	
Firebox Pressure	Pressure transducer	Honeywell	Annual	STD120	PI-0565B	Calibration	7/20/06	PI-5042A, P-5042B	Calibration	5/15/06
Caustic scrubber recycle flow rate	Diff. pressure transmitter	Honeywell	Annual	STD624	FI-0599	Calibration	7/20/06	FI-5069A, FI-5070	Calibration	5/15/06
Caustic scrubber recycle pressure	Pressure transmitter	Rosemount	Annual	3051CG	PI-5631	Calibration	7/20/06	PI-5122, PI-5123	Calibration	5/15/06
Caustic scrubber conductivity	Conductivity cell	Great Lakes, Inc.	Weekly	E63	AI-5592	Calibration	7/21/06	AI-5111	Calibration	7/21/06
Caustic scrubber recycle pH	pH probe and transmitter	Great Lakes, Inc.	Weekly	F53	AC-0534, AI-0525	Calibration	7/21/06	AC-5008, AI-5010	Calibration	9/20/06
CATOX inlet gas temperature	Thermocouple	Rosemount	Annual	644H	TI-5593	Calibration	7/20/06	TI-5112	Calibration	5/16/06
Stack gas flowrate	Flow sensor	Panametrics	Annual	GF868	FI-5526	Verification	7/24/06	FI-5068	Verification	5/16/06

Parameter Monitored	Instrument Type	Manufacturer	Calibration Frequency	Latest CMS Certification or Audit			
				Model Number	Instrument ID	Certification / Audit Type	Date
Stack CO Concentration – Primary Monitor	Non-dispersive Infra-Red (NDIR)	Thermo Environmental Instruments	Quarterly	48C (or equiv.)	AI-0522	Absolute Calibration Audit (ACA)	12/15/06
Stack CO Concentration – Secondary Monitor	Non-dispersive Infra-Red (NDIR)	Thermo Environmental Instruments	Quarterly	48C (or equiv.)	AI-5590	Absolute Calibration Audit (ACA)	12/15/06
Stack O <sub>2</sub> Concentration – Primary Monitor	Paramagnetic Detector (PMD)	Servomax	Quarterly	1440D (or equiv.)	AI-0551	Absolute Calibration Audit (ACA)	12/15/06
Stack O <sub>2</sub> Concentration – Secondary Monitor	Paramagnetic Detector (PMD)	Servomax	Quarterly	1440D (or equiv.)	AI-5591	Absolute Calibration Audit (ACA)	12/15/06
					AI-5110	Absolute Calibration Audit (ACA)	12/9/06

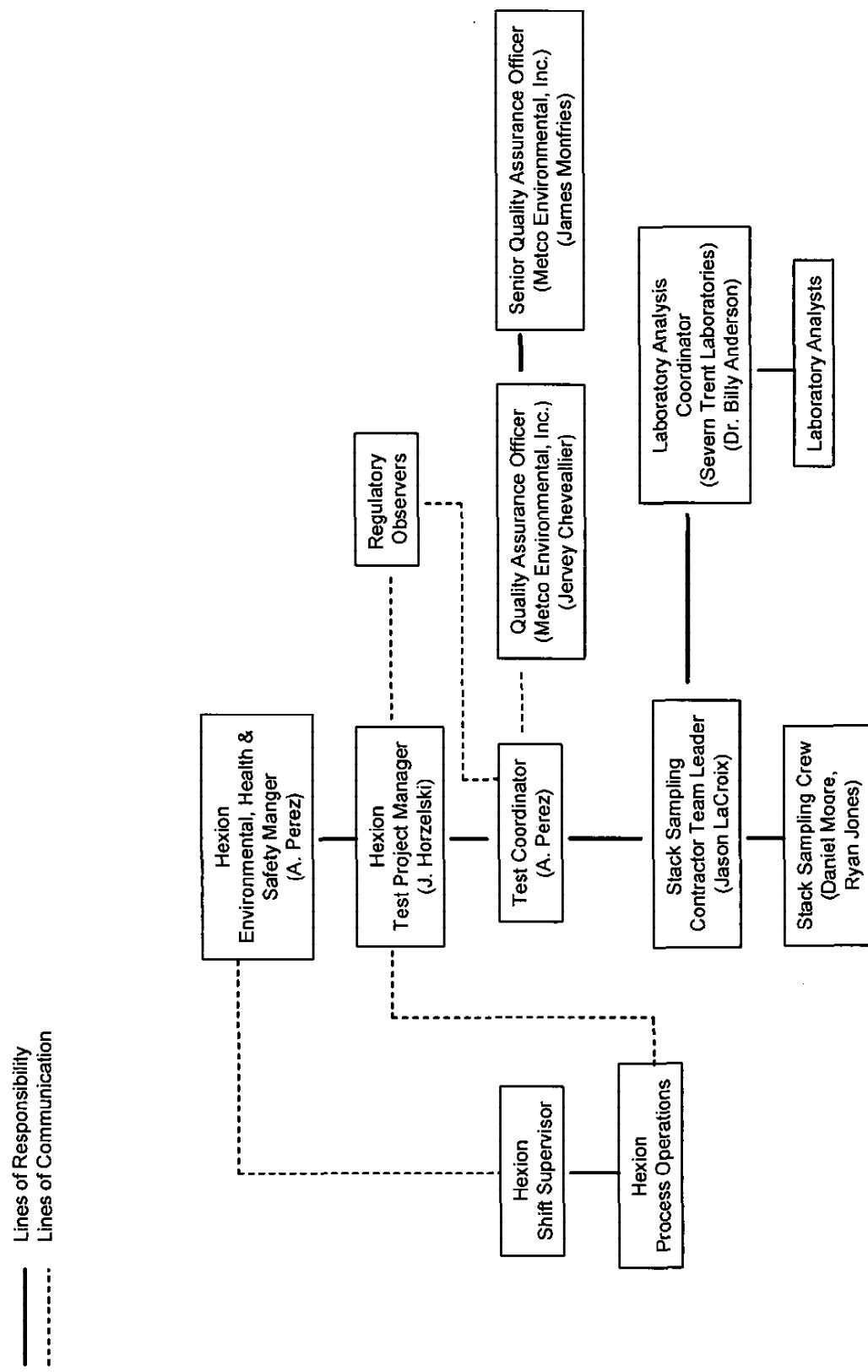


Figure 1: Test Project Organization

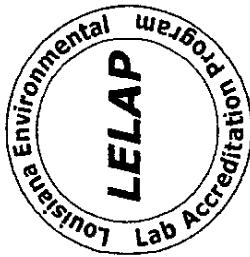
## **ATTACHMENT 1**

### **LELAP CERTIFICATIONS**



**STATE OF LOUISIANA**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

Is hereby granting a Louisiana Environmental Laboratory Accreditation to:



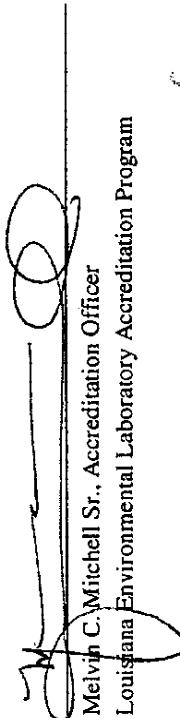
**METCO Environmental, Inc.**  
**3226 Commander Drive**  
**Carrollton, TX 75006**

Agency Interest No. 30711

According to the Louisiana Administrative Code, Title 33, Part I, Subpart 3, LABORATORY ACCREDITATION, the State of Louisiana formally recognizes that this laboratory is technically competent to perform the environmental analyses listed on the scope of accreditation detailed in the attachment.

The laboratory agrees to perform all analyses listed on this scope of accreditation according to the Part I, Subpart 3 requirements and acknowledges that continued accreditation is dependent on successful ongoing compliance with the applicable requirements of Part I. Please contact the Department of Environmental Quality, Louisiana Environmental Laboratory Accreditation Program (LELAP) to verify the laboratory's scope of accreditation and accreditation status. Accreditation by the State of Louisiana is not an endorsement or a guarantee of validity of the data generated by the laboratory, and does not constitute an endorsement of the suitability of the listed methods for any specific application.

To be accredited initially and maintain accreditation, the laboratory agrees to participate in two single-blind, single-concentration PT studies, where available, per year for each field of testing for which it seeks accreditation or maintains accreditation as required in LAC 33:I.4711.



A handwritten signature in black ink, appearing to read "Melvin C. Mitchell Sr.", followed by a cursive signature.

Melvin C. Mitchell Sr., Accreditation Officer  
Louisiana Environmental Laboratory Accreditation Program

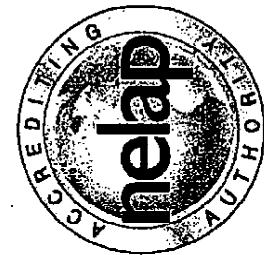
Certificate Number: 02034  
Expiration Date: June 30, 2007  
Issued On: July 1, 2006

*Laboratory Scope of Accreditation***Organization****02034**

**METCO Environmental Inc.**  
**3226 Commander Drive**  
**Carrollton, TX 75006**

**(972) 931-7127****Louisiana Stack Testing Program Certification**

Method Code	Method Ref	Analyte	Status	Date Effective	Type	AA
1968	Method 9 40 CFR 60 App. A (Analysis Only)	Opacity	Accredited	7/1/2003	STATE	LA
1977	SW-846 0010 (Sample Only)	Modified Method 5 Sample Train	Accredited	7/1/2003	STATE	LA
1979	SW-846 0011 (Sample Only)	Acetaldehyde	Accredited	7/1/2003	STATE	LA
1979	SW-846 0011 (Sample Only)	Acetophenone	Accredited	7/1/2003	STATE	LA
1979	SW-846 0011 (Sample Only)	Formaldehyde	Accredited	7/1/2003	STATE	LA
1979	SW-846 0011 (Sample Only)	Isophorone	Accredited	7/1/2003	STATE	LA
1979	SW-846 0011 (Sample Only)	Propionaldehyde	Accredited	7/1/2003	STATE	LA
1983	SW-846 0023A (Sample Only)	Dioxin & Furan Sampling System	Accredited	7/1/2003	STATE	LA
1985	SW-846 0030 (Sample Only)	Volatile Organic Sampling Train (VOST)	Accredited	7/1/2003	STATE	LA
1987	SW-846 0031 (Sample Only)	Sampling Method for VOCs (SM/VOC)	Accredited	7/1/2003	STATE	LA
1995	SW-846 0060 (Sample Only)	Antimony	Accredited	7/1/2003	STATE	LA
1995	SW-846 0060 (Sample Only)	Arsenic	Accredited	7/1/2003	STATE	LA
1995	SW-846 0060 (Sample Only)	Barium	Accredited	7/1/2003	STATE	LA
1995	SW-846 0060 (Sample Only)	Beryllium	Accredited	7/1/2003	STATE	LA
1995	SW-846 0060 (Sample Only)	Cadmium	Accredited	7/1/2003	STATE	LA
1995	SW-846 0060 (Sample Only)	Cobalt	Accredited	7/1/2003	STATE	LA
1995	SW-846 0060 (Sample Only)	Copper	Accredited	7/1/2003	STATE	LA
1995	SW-846 0060 (Sample Only)	Lead	Accredited	7/1/2003	STATE	LA
1995	SW-846 0060 (Sample Only)	Manganese	Accredited	7/1/2003	STATE	LA
1995	SW-846 0060 (Sample Only)	Mercury	Accredited	7/1/2003	STATE	LA
1995	SW-846 0060 (Sample Only)	Nickel	Accredited	7/1/2003	STATE	LA
1995	SW-846 0060 (Sample Only)	Particulates	Accredited	7/1/2003	STATE	LA
1995	SW-846 0060 (Sample Only)	Phosphorus total	Accredited	7/1/2003	STATE	LA
1995	SW-846 0060 (Sample Only)	Selenium	Accredited	7/1/2003	STATE	LA
1995	SW-846 0060 (Sample Only)	Silver	Accredited	7/1/2003	STATE	LA
1995	SW-846 0060 (Sample Only)	Thallium	Accredited	7/1/2003	STATE	LA
1995	SW-846 0060 (Sample Only)	Total chromium	Accredited	7/1/2003	STATE	LA



**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

Is hereby granting a Louisiana Environmental Laboratory Accreditation to:



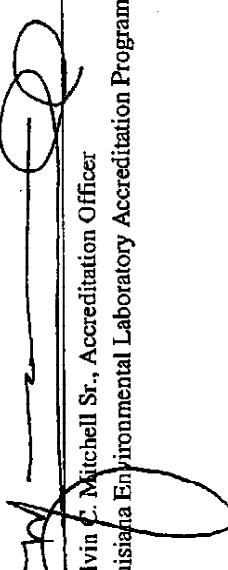
**STL Environmental**  
5815 Middlebrook Pike  
Knoxville, TN 37921-5947

Agency Interest No. 83979

According to the Louisiana Administrative Code, Title 33, Part I, Subpart 3, LABORATORY ACCREDITATION, the State of Louisiana formally recognizes that this laboratory is technically competent to perform the environmental analyses listed on the scope of accreditation detailed in the attachment.

The laboratory agrees to perform all analyses listed on this scope of accreditation according to the Part I, Subpart 3 requirements and acknowledges that continued accreditation is dependent on successful ongoing compliance with the applicable requirements of Part I. Please contact the Department of Environmental Quality, Louisiana Environmental Laboratory Accreditation Program (LELAP) to verify the laboratory's scope of accreditation and accreditation status. Accreditation by the State of Louisiana is not an endorsement or a guarantee of validity of the data generated by the laboratory, and does not constitute an endorsement of the suitability of the listed methods for any specific application.

To be accredited initially and maintain accreditation, the laboratory agrees to participate in two single-blind, single-concentration PT studies, where available, per year for each field of testing for which it seeks accreditation or maintains accreditation as required in LAC 33:1:4711.

  
Melvin C. Mitchell Sr., Accreditation Officer  
Louisiana Environmental Laboratory Accreditation Program

Certificate Number: 03079  
Expiration Date: June 30, 2007  
Issued On: July 1, 2006



## *Laboratory Scope of Accreditation*

(865) 291-3000

Organization

03079  
STL Knoxville  
5815 Middlebrook Pike  
Knoxville, TN 37921-5

Issue Date: July 11, 2006  
Expiration Date: June 30, 2007

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Analyte	Status	Date Effective	Type
n-Nitrosopyrrolidine	Accredited	10/6/2003	STATE
c-Tolidine	Accredited	10/6/2003	STATE
p-Dimethylaminoazobenzene	Accredited	10/6/2003	STATE
Pentachlorobenzene	Accredited	10/6/2003	STATE
Pentachloroethane	Accredited	10/6/2003	STATE
Pentachloronitrobenzene	Accredited	10/6/2003	STATE
Pentachlorophenol	Accredited	5/9/2003	STATE
Phenacetin	Accredited	10/6/2003	STATE
Phenanthrene	Accredited	5/9/2003	STATE
Phenol	Accredited	5/9/2003	STATE
Pyrene	Accredited	5/9/2003	STATE
Pyridine	Accredited	5/9/2003	STATE
Safrole	Accredited	10/6/2003	STATE
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	Accredited	5/9/2003	STATE
1,2,3,4,6,7,8,9-Octachlorodibenz-p-dioxin (OCDD)	Accredited	5/9/2003	STATE
1,2,3,4,6,7,8-Heptachlorodibenzofuran [1,2,3,4,6,7,8-hpcdf]	Accredited	5/9/2003	STATE
1,2,3,4,6,7,8-Heptachlorodibenz-p-dioxin [1,2,3,4,6,7,8-hpcdd]	Accredited	5/9/2003	STATE
1,2,3,4,7,8,9-Heptachlorodibenzofuran [1,2,3,4,7,8,9-hpcdf]	Accredited	5/9/2003	STATE
1,2,3,4,7,8-Hxcdff	Accredited	5/9/2003	STATE
1,2,3,6,7,8-Hxcdff	Accredited	5/9/2003	STATE
1,2,3,6,7,8-Hxcdff	Accredited	5/9/2003	STATE
1,2,3,7,8-Hxcdff	Accredited	5/9/2003	STATE
1,2,3,7,8-Pecdd	Accredited	5/9/2003	STATE
1,2,3,7,8-Pecdf	Accredited	5/9/2003	STATE
2,3,4,6,7,8-Hxcdff	Accredited	7/18/2003	STATE

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Print Date



### Laboratory Scope of Accreditation

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**Organization** [REDACTED] (865) 291-3000  
**Code** 03079

**STL Knoxville**  
**5815 Middlebrook Pike**  
**Knoxville, TN 37921-5947**

Air and Emissions Certification Method Code	Method Ref	Analyte	Status	Date Effective	Type	AA
10187209	EPA 8290	2,3,4,7,8-PeCDF	Accredited	5/9/2003	STATE	LA
10187209	EPA 8290	2,3,7,8-TCDD	Accredited	5/9/2003	STATE	LA
10187209	EPA 8290	2,3,7,8-TCDF	Accredited	5/9/2003	STATE	LA
10187209	EPA 8290	2,3,7-B-Tetrachloro dibenzo-p-dioxin	Accredited	5/9/2003	STATE	LA
10187209	EPA 8290	Dibenzo-p-dioxins & Dibenzofurans	Accredited	5/9/2003	STATE	LA
10187209	EPA 8290	Total Heptachlorodibenzofuran	Accredited	10/6/2003	STATE	LA
10187209	EPA 8290	Total Heptachlorodibenzo-p-dioxin	Accredited	10/6/2003	STATE	LA
10187209	EPA 8290	Total Hexachlorodibenzofuran	Accredited	10/6/2003	STATE	LA
10187209	EPA 8290	Total Hexachlorodibenzo-p-dioxin	Accredited	10/6/2003	STATE	LA
10187209	EPA 8290	Total Pentachlorodibenzofuran	Accredited	10/6/2003	STATE	LA
10187209	EPA 8290	Total Pentachlorodibenzo-p-dioxin	Accredited	10/6/2003	STATE	LA
10187209	EPA 8290	Total Tetrachlorodibenzofuran	Accredited	10/6/2003	STATE	LA
10187209	EPA 8290	Total Tetrachlorodibenzo-p-dioxin	Accredited	10/6/2003	STATE	LA

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